Summary of Testimony:
Public Hearing on Data Center Consolidation
November 12, 2003

The hearing commenced at 9:30 am, and adjourned at approximately 10:40 am. The hearing was chaired by Dave Willis. With Dave on the dais were Deborah Fraga-Decker of HHSDC, Deborah Brady of Teale Data Center, and Richard Gillihan and Judy Day of the Department of Finance.

I. PARTIES WHO SUBMITTED WRITTEN TESTIMONY

Citrix
Gartner (electronic)
META Group
Microsoft
Northrup Grumman
Oracle
Tom Tuduc, WebArches
VeriSign
Visionary Integration Professionals, Inc. (electronic)

II. SPEAKERS

Clark Kelso, State CIO

The text of Mr. Kelso's remarks is available on the Department of Finance website at www.dof.ca.gov, through the link to Data Center Consolidation Work Group.

John McRae, Computer Associates

Mr. McRae indicated that he would address the "why" (i.e., benefits) of consolidation and the "how".

Under the benefits, he indicated that most consolidations start with "virtual" consolidation (such as contracts and vendors), i.e., things that have a quick payback, such as six months or less. There are savings in hardware. There are savings in infrastructure, from standardization (e.g., e-mail) and federalization. Consolidation can result in better service, economies of scale, lower billing rates. Consolidation allows the sharing of knowledge that has been attained by experienced staff. Consolidation can result in faster response times due to process re-engineering.

Under the "how", Mr. McRae indicated that there are three components: people, planning, and process. "People" means that there must be executive leadership, including from the Legislature. "Planning" includes having a management team that has real power, and starting with the "low-hanging fruit", such as internal consolidation. "Process" means re-engineering and innovation (i.e., exploiting the resources available from the consolidation).

Mitchell Sherman, META Group

Mr. Sherman indicated that the benefits of consolidation involved savings in people, software, hardware, and facilities (e.g., space, utilities), and improvements in services, efficiency, processes, etc. He emphasized these points by noting, "scale does matter." He talked about the critical importance of planning at all phases, and the need for continual, iterative planning. He also noted the challenges of consolidation include lack of common standards, consolidating servers, and consolidating applications.

META has a methodology for approaching consolidation that has three basic components. First, benchmark costs against industry standards to understand your true costs. Second, determine how consolidation will enable the data center to better serve customer needs. Third, develop a detailed plan that includes process analysis.

Dave Podwojski, Citrix Systems

Mr. Podwojski cited several examples of successful consolidations that resulted in large savings, including the state of Florida, which is projecting to save over $100 million over five years.

He identified the benefits of consolidation are in the areas of security, standardization, simplification, and processes. Consolidation can result: in more flexibility and agility in responding to customers; the creation of best practices; the ability to offer more services to more users; the elimination of redundant administration; lower costs; increased security; and better accountability.

The role of a consolidate data center in state government can be to demonstrate statewide leadership. Mr. Podwojski indicated that there was the opportunity for a market driven, customer driven approach, but that this would require a change in the current business model. He also indicated that the data centers should be given more latitude to administer their affairs and act more like a business.

In addressing the topic of concerns with consolidation, Mr. Podwojski indicated that charging fees for all services undermines the support of common needs. He indicated that the State should consider core funding for the data centers, e.g., for consolidated infrastructure.

Kim Polese, Marimba

Ms. Polese addressed the issue of server consolidation, pointing to an explosion of server use in recent years. Large numbers of servers are complex to manage, and result in a variety of problems, such as excess costs (i.e., in people, storage, hardware), decreased quality of service, lost opportunities to pool resources, and server usage rates that are often only 10 percent to 20 percent of capacity. There are also security problems, including unidentified rogue servers, and patches that are incorrectly installed.

Consolidation can help by producing savings in hardware, software, storage and administration. The quality of service can be improved. Consolidation can be more complex, but it can also be

a catalyst for streamlining processes and aligning information technology (IT) with customers' business needs. Consolidation can also provide an opportunity for better security.

There are three main phases of consolidation. The first phase is planning, which includes inventorying resources and information gathering (a particular focus of this phase is the identification of unused or unneeded servers). The second phase is implementation of the plan. Ms. Polese stressed the importance of the third phase, which is ongoing management and maintenance.

Ms. Polese cited the example of Barclays' experience with server aggregation. Barclays quickly eliminated 40 percent of its servers, and expected to eliminate a total of 67 percent over time. There were significant savings in licensing, physical plant and human resources costs. Security, including access control and disaster recoverywas increased. The company was able to manage viruses proactively and better manage security patches.

Ms. Polese closed with two final points. First, consolidation should be considered a first step, and that data centers must focus on ongoing management. Second, consolidation can be a catalyst to support good processes and a better alignment of IT with the customers' needs.

Craig Russell, Microsoft

Mr. Russell described the way in which Microsoft provides information technology support to its employees. First, IT has been centralized (i.e., e-mail, directory services), but with regional representation to maintain customer input. Second, Microsoft has a federated model, in which individual departments develop their own applications.

Microsoft provides three levels of IT services to their internal customers. All levels have baseline standards (e.g., security). The higher levels of service have the most standards and the lowest cost. Managers must decide if they want to manage their own servers. Customers who need non-standardized configurations can get them, but they pay more. In the past, Microsoft employees used various platforms, but the company has since standardized on Windows/Intel architecture and related tools.

Standardization has led to increased efficiency, reduced costs, and decreased time needed to resolve problems.

Microsoft uses a partial cost recovery mechanism, which has been effective in producing the desired behavior—that is, the various departments tend to decide that it is better to let the IT department manage their servers. The cost recovery mechanism has also led to a better understanding of costs, and better accountability.

Mike Hewitt, Gartner

Mr. Hewitt stated that the State's consolidation effort has not been successful. He stated that before consolidation, the State must have an effective IT governance structure. Mr. Hewitt stated that data center consolidation has the potential for cost savings, but not in the first year (savings would be in the second year and beyond). Mr. Hewitt acknowledged that without cost savings, the political viability of consolidation is not exciting.

Mr. Hewitt stated that for consolidation to be a success, the State needs a governance structure that it doesn't have. Typically, consolidation is an outcome of a new governance structure. On the other hand, consolidation could be a first step in a new governance structure.

Mr. Hewitt stated that Teale and HHSDC are well-run, but are hampered by lack of General Fund support. There are substantial savings that could be achieved with server consolidation, but the data centers can't do it alone. He pointed out that about half of the Microsoft products owned by the State are so old that they are not supported by Microsoft anymore.

Ronnie Christianson, Oracle

Ms. Christianson indicated that Oracle supports consolidation, that they have done it themselves. Oracle consolidated 40 data centers into one, and 97 e-mail systems into two. Oracle saved $250 million out of $500 million formerly spent on IT support.

Ken Tiratira, Northrup Grumman

Mr. Tiratira indicated that Northrup Grumman in recent years has made numerous acquisitions of other companies, and has consolidated their data centers following such acquisitions. The company has saved over $100 million, and has migrated eight e-mail systems to one.

The benefits have been in four major areas: cost savings, common computing platforms, institution of common practices and standards, and the elimination of redundancy. Mr. Tiratira recommended the following four objectives be studied: raised floor consolidation, back up consolidation, contract consolidation, and administrative consolidation.